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NOTICE OF ALLOWANCE AND FEE(S) DUE

2292 7590 06/29/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 EXAMINER

CAO, ALLEN T

ART UNIT PAPER NUMBER

2622

DATE MAILED: 06/29/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/574,692	04/05/2006	Akihiro Fukasawa	1190-0624PUS1	3728		
THE E OF INVENTION OFFICAL DISK DEVICE						

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	09/29/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further e indicated unless correcte maintenance fee notificat	form should be used for correspondence including d below or directed oth ions.	or tran ig the l icrwise	smitting the ISSU Patent, advance or in Block 1, by (a	JE FEE and PUBLICAT rders and notification of a) specifying a new corre	TON FEE (if requestion representation of the contract of the c	ired). I vill be ; and/o	Blocks 1 through 5 st mailed to the current r (b) indicating a sepa	hould be completed where correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				No Fee pag	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
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				Г				(Depositor's name)
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APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/574,692	04/05/2006			Akihiro Fukasawa		1	190-0624PUS1	3728
TITLE OF INVENTION:	OPTICAL DISK DEV	ICE						
APPLN, TYPE	SMALL ENTITY	IS:	SUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300	\$0		\$1810	09/29/2009
EXAM	INER		ART UNIT	CLASS-SUBCLASS	1			
CAO, AI	LEN T		2627	720-608000	_			
"Fee Address" indi PTO/SB/47; Rev 03-0; Number is required. 3. ASSIGNEE NAME AT	ondence address (or Cha 1/122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT/ ess an assignee is ident in 37 CFR 3.11. Comp	nge of ' ' Indicated. Use	Correspondence ation form e of a Customer E PRINTED ON		o 3 registered pater vely, le firm (having as a agent) and the nam wreys or agents. If printed. pe)	n memb es of u no nan	er a 2	ocument has been filed for
Please check the appropri 4a. The following fee(s) a Issue Fee Publication Fee (N Advance Order - #	re submitted:		41	inted on the patent): D. Payment of Fee(s): (Ple D A check is enclosed. D Payment by credit ca	ase first reapply a	ny prev	viously paid issue fee	
				overpayment, to Dep	osit Account Numb	er	(enclose a	n extra copy of this form).
 Change in Entity Stat a. Applicant claims 	us (from status indicate) SMALL ENTITY statu			☐ b. Applicant is no los	iger claiming SMA	LLEN	FITY status. Sec 37 Cl	R 1.27(g)(2).
NOTE: The Issue Fee and interest as shown by the r	f Publication Fee (if req ecords of the United Sta	uired) v tes Pate	will not be accepted and Trademark	d from anyone other than Office.	the applicant; a reg	istered	attorney or agent; or th	e assignee or other party in
Authorized Signature					Date			
Typed or printed name					Registration !			
This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.3 U.S.C. USPT rden, sh D NOT	11. The informatic 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR	on is required to obtain or 1.14. This collection is es depending upon the indi e Chief Information Offic COMPLETED FORMS T	retain a benefit by timated to take 12 vidual case. Any co er, U.S. Patent and O THIS ADDRES:	the pub minuter omment Trader S. SEN	lic which is to file (and s to complete, includin is on the amount of tir nark Office, U.S. Dep D TO: Commissioner	I by the USPTO to process) g gathering, preparing, and ne you require to complete utment of Commerce, P.O. for Patents, P.O. Box 1450,

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2292	7590	06/29/2009		EXAMINER			
BIRCH STEW	ART KOI	CAO, ALLEN T					
PO BOX 747		ART UNIT	PAPER NUMBER				
FALLS CHURC	H, VA 220	2627					

DATE MAILED: 06/29/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 755 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 755 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. 10/574 692 FUKASAWA, AKIHIRO Notice of Allowability Examiner Art Unit 2627 Allen T. Cao.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 4/5/06.
- 2. The allowed claim(s) is/are 1-6.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - b) ☐ Some* c) ☐ None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08).
- 4. ☐ Examiner's Comment Regarding Requirement for Deposit
- Paper No./Mail Date 4/25/06 & 10/8/08 of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date

Other .

- 7. T Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance

Applicant(s)

/Allen T Cao/

Primary Examiner, Art Unit 2627

Application/Control Number: 10/574,692

Art Unit: 2627

- 1. Claims 1-6 are allowed.
- 2. The following is an examiner's statement of reasons for allowance:

The prior art of record neither discloses nor suggests a) an optical disk device having a combination limitations structural including a main chassis: a disk tray movable in a direction protruding from said main chassis and in the opposite direction so as to carry said optical disk in or out of said main chassis; a turntable that rotates said optical disk carried- in by said disk tray; a traverse chassis that supports said turntable, said traverse chassis being supported by said main chassis so that said traverse chassis is swingable between a holding position in which said turntable is able to hold said optical disk and a retracting position retracting from said holding position; an optical pickup that performs recording or reproducing of a signal on said optical disk rotated by said turntable; a common motor that generates a driving force for feeding said optical pickup, for swinging said traverse chassis, and for moving said disk tray; a first gear that rotates by a driving force of said motor; a second gear that rotates by transmission of rotation from said first gear; a rack portion integrally formed with said optical pickup, said rack portion engaging said first gear to move, an engagement between said rack portion and said first gear being released when said rack portion reaches a predetermined engagement-releasing area; a slide rack relatively movable with respect to said rack portion, said slide rack engaging said first gear to move; a slider member having an engaging portion capable of engaging said second gear and a cam portion that causes said traverse chassis to swing between said holding position and said retracting position; and a trigger member that moves in conjunction with said slide rack in a state

Art Unit: 2627

where said engagement between said rack portion and said first gear is released, so as to move said slider member to a position in which said slider member engages said second gear, wherein said first gear and said second gear have the same number of teeth, and the rotation is transmitted from said first gear to said second gear so that the ratio of the number of rotations of said first gear to the number of rotations of said second gear is 1:1, as set forth in claim 1; b) an optical disk device having a combination limitations structural including an optical pickup that performs recording or reproducing of a signal on an optical disk; a pickup driving mechanism including a rack portion integrally formed with said optical pickup, said pickup driving mechanism causes said optical pickup to move between an outer peripheral position and an inner peripheral position of said optical disk; a motor for driving said pickup driving mechanism; a worm gear fixed to an output shaft of said motor; and a gear having a smaller gear portion that engages said rack portion, and a larger gear portion coaxial with said smaller gear portion and engaging said worm gear, wherein said larger gear portion is composed of a spur gear, and a rotation axis of said worm gear is inclined with respect to a rotation axis of said larger gear portion at an angle corresponding to a lead angle of said worm gear, as recited in claim 6.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen T. Cao whose telephone number is (571) 272-7569. The examiner can normally be reached on Mon - Thurs (7:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANDREA WELLINGTON can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Allen T Cao/ Primary Examiner, Art Unit 2627

/A. T. C./ Primary Examiner, Art Unit 2627